- 10.8 Attendance at conference calls and/or meetings associated with the test phase shall be at the discretion of and under the direction of the Primary and/or Secondary Participant who they are representing.
- 10.9 Participation in the execution of tests and data collection/analysis shall be at the discretion of and under the direction of the Primary and or Secondary Participant who they are representing.
- 10.10 The Contributing Participant shall provide the appropriate level of support for any equipment and/or software that they are contributing to the test phase.
- 10.11 The Contributing Participant shall keep a log of lessons learned during their participation in the testing phase.
- 10.12 The Contributing Participant is responsible for the ordering, testing, and trouble shooting of their facilities associated with the configuration setup offered from their lab.
- 10.13 At the beginning of the test program (i.e., Baseline) and thereafter prior to resumption of testing, each participant will inform all the other parties of the operating condition of its connected equipment.
- 10.14 The contributing Participant is responsible for securing all equipment to be used, populated with the data received from the Primary Participant (e.g., switches data filled, T1 channels cross connected, test scripts built and applied to test boxes, etc.).
- 10.15 Contributing Participants shall ensure that information shared with employees of their company is handled in accordance with NTC and NIIF Information Sharing Guidelines. Except for employees of the participants having a need to know, no other person or entity should have access to the testing operations or should be permitted to participate in any way in the test program, including communications conducted between any of the participants, except as the affected participants have been given prior notification.
- 10.16 The Contributing Participant is responsible for retaining all test results associated with their network, such results should be archived in accordance with their companies guidelines for document retention, for a period of one (1) year and until all problems have been processed to the satisfaction of all participants.

#### 11. TEST SCRIPT AUTHOR RESPONSIBILITIES

This section describes the responsibilities of the Test Script Author and a Test Script Template.

- 11.1 Develop test scripts/scenarios that ensure that the capability of the network is being validated.
- 11.2 Provide test scenarios to the NT Committee in the format as developed/outlined by the participants of the NT Committee (see 11.7).
- 11.3 Submit all test scripts to the NTC for acceptance, modification and approval by the appointed due date.
- 11.4 Incorporate any upgrades to the proposed test scripts and provide modified copies to the NTC for finalization by the appointed due date.

- 11.5 Participate with the personnel applying the test in the review of the test scripts for understanding and modification where required.
- 11.6 The Test Script Authors may have access to all test configurations and results of the tests for which they have provided the scripts, and to the extent that it does not conflict with the NTC and NIIF Information Sharing Guidelines.

#### 11.7 TEST SCRIPT TEMPLATE

This template provides the basic requirements for data to develop and submit a test script for consideration to the NTC.

1. TEST SCRIPT NUMBER	(assigned by the NTC)
2. TEST SCRIPT TITLE	
B. AUTHORS NAME	
COMPANY	
CONTACT NUMBER	

#### 4. PURPOSE OF THE TEST

Features or functions being tested

Target areas of network being tested (physical, message type, traffic)

ANSI reference or equal

#### 5. HIGH LEVEL DESCRIPTION

Primary Components (focus)

High level walk through

#### 6. TEST SETUP

Reference standard setup

Special equipment

Special requirements

# 7. TEST PROCEDURE

Action

High level response

Detailed response

On-line analysis

Off-line analysis

#### 12. HUB PROVIDER RESPONSIBILITIES

This section describes the responsibilities of the Hub Provider.

- 12.1 The HUB Provider/Administrator is responsible for:
  - a. Providing the channel assignments for the interconnection of the participants' labs.
  - **b.** Assuring that data collection and monitoring are adequately performed where requested.
  - c. Providing the test participants with updates on the interconnection status and data monitored where requested.
  - d. Providing the physical interconnection for the participants' labs.
- 12.2 The HUB Provider/Administrator will adhere to the NTC Information Sharing Guidelines.
- 12.3 HUB Provider shall ensure that information shared with employees of their company is handled in accordance with NTC and NIIF Information Sharing Guidelines. Except for employees of the HUB Provider/Administrator having a need to know, no other person or entity should have access to the testing operations or should be permitted to participate in any way in the test program, including to communications between any of the participants, except as the affected parties have been given prior notification.
- 12.4 The HUB Provider/Administrator shall keep a log of lessons learned during their participation in the testing phase.
- 12.5 The HUB Provider/Administrator is responsible for retaining test results associated with their network, such results should be archived in accordance with their companies guidelines for document retention, for a period of one (1) year or until all problems have been processed to the satisfaction of all participants.

#### 13. OVERALL COORDINATOR RESPONSIBILITIES

This section describes the responsibilities of the Overall Coordinator.

- 13.1 The Overall Coordinator will be responsible for overseeing all activities within a given test phase, which shall include but not be limited to:
  - a. Coordinating and Overseeing testing activities.
    - coordinating test script walk-throughs prior to implementation with script author
    - compiling test phase plan (including the dial plan and call through test plan)
    - responsible for overall management
    - taking test notes for use during analysis
  - **b.** Ensuring that the provisioning and interconnection of laboratories for testing purpose is completed by the due date.
  - c. Securing conference bridges and any necessary communications to facilitate testing from beginning to end.
  - d. Ensuring that signalling and participant Operation, Administration, Maintenance and Provisioning (OAM&P) data collection and analysis are conducted appropriately.
  - e. Coordinating the generation, editing and issuing of test reports from individual participants based on input and analysis from all participants; compile and publish final report.
  - f. Provide feedback to the NTC.
  - g. Ensuring that activities of the given phase are conducted in the most technically efficient, effective, unbiased and equitable manner as possible.
  - h. Appendix 5 is a checklist to be utilized by the Overall Coordinator to ensure that all testing requirements are addressed.
- 13.2 Overall Coordinator shall ensure that information shared with employees of their company is handled in accordance with NTC and NIIF Information Sharing Guidelines. Except for employees of the Overall Coordinator having a need to know, no other person or entity shall have access to the testing operations or shall be permitted to participate in any way in the test program, including communications conducted between any of the participants, except as the affected participants have been given prior notification.
- 13.3 The Overall Coordinator upon assumption of the responsibility of overseeing the phase under test, shall review with all identified participants their respective responsibilities.
- 13.4 The Overall Coordinator shall review the past list of lessons learned with the current participants to ensure that the same experiences that have caused problems are not replicated and that those experiences that have aided the process are reviewed.
- 13.5 The Overall Coordinator shall keep a log of lessons learned during their participation in the testing phase. On completion of the testing phase those lessons learned by all participants shall be coalesced into one document. The lessons learned shall be shared with the NTC for consideration for inclusion in expectations of the appropriate roles etc.

- 13.6 The Overall Coordinator is responsible for retaining all test results associated with their participation in the NTC phase, such results should be archived in accordance with their companies guidelines for document retention, for a period of one (1) year or until all problems have been processed to the satisfaction of all participants.
- 13.7 The Overall Coordinator shall ensure that all Baseline tests and criteria are met prior to application of the Phase test scripts under test.
- 13.8 The Overall Coordinator, together with the Primary Participants, are responsible for determining what the process and responsibilities are for the analysis of the data prior to commencement of testing.
- 13.9 Any anomalies identified during Baseline testing should be reconciled prior to proceeding with the test scripts for the current phase testing.
- 13.10 Where it has been determined that the anomalies will not have a significant effect on the application of test scripts, the Participants shall determine whether to continue the test. The rational for continuance shall be included in the appropriate Reports on the phase testing.
- 13.11 The Overall Coordinator should identify any additional requirements above and beyond those identified by the NTC for Baseline testing, taking into account the network under test and the test scripts to be applied.
- 13.12 For reference purposes, the Overall Coordinator for each test phase shall maintain a record identifying the Primary Participant(s) and Vendor(s), if any, associated with each reported anomaly. This information will be used solely to respond to Participants and / or Vendors seeking to determine whether their network / product was the subject of the reported anomaly. In the event that the NTC seeks information on the status of an anomaly, the Overall Coordinator may confidentially notify the Primary Participant in whose test network the anomaly was identified.
- 13.13 The Overall Coordinator shall provide anomaly status updates requested by the NTC. The Overall Coordinator shall further notify the NTC when requested information has not been supplied.

#### 14. CO-CHAIR RESPONSIBILITIES

This section describes the selection criteria and responsibilities for the NTC Co-chairs

The NTC will have two co-chairs who will act as facilitators of the meeting.

The two Co-chairs will be selected from the body of current regular (at least four consecutive meetings) committee attendees

The NTC co-chairs are solicited on a voluntary basis and are approved by the NT Committee.

The term of office for the NTC Co-chairs will be a minimum of one year, with the opportunity to continue to serve for a longer period of time based on the purview of the NT Committee membership. It is suggested that leadership changes within the Committee be staggered by at least two meetings, if possible, to provide for leadership continuity.

Anyone volunteering to serve as an NTC co-chair must agree to carry out the responsibilities associated with this leadership role as stated in this document.

An NTC participant's first responsibility is to represent his/her company. However, when acting as Co-chair, the primary responsibility is to facilitate the committee meetings. This includes:

- calling the meeting to order,
- making sure the agenda is followed,
- keeping the discussion pertinent and on track,
- interacting with other committee Co-chairs

The Co-chairs should remain neutral in all discussions and try not to interject any biases or company position into discussions or issue resolutions. If the Co-chair is their company's only representative at the meeting, then the Co-chair may state a company position only after formally stating that he/she is speaking as a company representative and not as a committee Co-leader.

The Committee Co-chairs should provide direction to the committee secretary on performing the administrative duties for the committee. All NTC meeting minutes must be reviewed and approved by the committee Co-chairs before they are distributed by the secretary.

The Committee co-chairs should also keep the Forum Moderator informed of any pending changes in the committee leadership.

The Committee Co-chairs must be familiar with the CLC Principles and Procedures and conduct the meeting in accordance with such principles and guidelines.

#### 15. INFORMATION SHARING GUIDELINES

The following are the Network Interconnection/Interoperability Forum (NIIF) approved guidelines for the sharing of information gleaned during the testing phases conducted under the auspices of the NTC.

- 15.1 Results of all Internetwork Interoperability tests performed will be made available to those parties (Access Service Providers/Access Service Customers) engaged in the actual testing under non-disclosure agreements. In addition, test results will be made available only to those companies that have been identified by any of the Access Service Providers/Access Service Customers as being allowed to receive such information under express written non-disclosure agreements (existing or future).
- 15.2 Test results should be shared at a protocol message exchange level where EXPECTED results differ from ACTUAL results or where there are any anomalies.

#### ADDITIONAL INFORMATION SHARED SHOULD INCLUDE:

- Test number
- Product/Vendor(s) name
- Hardware/Software release utilized including identification of patches/updates/options
- Configurations and relevant administrative data
- Action plan to address anomalies

In addition, where expected results equal observed results, the following information should be shared:

- Test number
- 15.3 The Access Service Provider/Access Service Customers engaged in the testing will be responsible for retaining all test results.
- 15.4 The Access Service Provider/Access Service Customer will be responsible for performing Interim/Final analysis. No results, analysis, or reports, except these detailed in Paragraph "A", concerning the internetwork interoperability testing will be disclosed to parties other than Access Service Providers/Access Service Customers engaged in the actual testing, without express written permission of the Access Service Providers, Access Service Customers and the Vendors who are involved in the testing and about whom the information is being disclosed.
- a. All principal Access Service Providers/Access Service Customers involved in internetwork interoperability testing shall collectively prepare a Final analysis Report for disclosure to include:
  - Test description
  - Test configuration
  - Internetwork oriented test results

It shall not include proprietary information.

- 15.5 Prior to release, all Access Service Providers/Access Service Customers and Vendors are to be provided with an opportunity to provide technical comment on the accuracy of the contents and assurance of proprietary information protection.
- 15.6 Where analysis identifies an issue associated with interoperability the participating Access Service Providers/Access service Customers and or Vendors who are experiencing the problem will proactively resolve such issues and communicate such resolutions or action plans to their respective Access Service Customers/Access Service Providers customers or appropriate interconnected carriers.
- 15.7 No Access Service Provider/Access Service Customer/Vendor shall utilize any information gleaned during Internetwork Interoperability testing for competitive advantage or disadvantage purposes.

15.8 - During the term of the test program and prior to public release of the final document by the NTC, participants, hub Provider or Overall Coordinator shall not conduct public discussions nor publish any article about the NTC testing results without full knowledge and agreement of the participants of that particular phase.

#### 15.9 TESTING PHASE PARTICIPANTS ANALYSIS MEETINGS

- 15.9.1 During the testing and analysis phase of a particular test phase there is a need to discuss/share information that may be of a sensitive nature and/or is deemed proprietary.
- 15.9.2 The following guidelines should be adhered to in order to facilitate the discussion and sharing of such information in an analysis meeting.
  - A. Where companies already have in existence a non-disclosure agreement and the contents of the agreement pertain to the NTC, such agreements/guidelines should be adhered to by the parties affected by the agreement.
  - **B.** Where a non-disclosure agreement is not in existence between interacting parties of the phase under discussion, the following guidelines should be adhered to:
    - All supplier or network specific information disclosed shall be utilized solely for the purpose of facilitating the analysis of the data and development of the final report.
    - Recipients of any and all data or information should utilize the same degree of care in the protection of such data or information that they would use in the protection of their own proprietary data or information.
    - For purposes of analyzing NTC test phase data, recipients may share this data with certain parties who agree to adhere to these guidelines and the information sharing guidelines outlined in Section 14 of the NTC Reference Document. These parties may be employees of participating companies with a need to know or affiliates who have been identified to the test phase participants prior to the sharing of data.
  - C. Proprietary restrictions do not apply under the following circumstances:
    - Information already in the possession or control of the recipient, obtained outside NTC test phase prior to the interaction. In such case any existing proprietary restrictions shall prevail.
    - Information that is publicly known.
    - Information that is received from an external source (i.e. those not attending the meeting) who is free to disclose it without obligation to the information owner.

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# 16. TESTING PLAN TIMELINE TEMPLATE

This section provides the generic outline for the planning, implementation and auditing of the Phase under test.

# Proposed Phase Testing Schedule/Requirements

<u>Dates</u> Obj Act

# **OBJECTIVE TEST START DATE IDENTIFIED:**

- \* Pre-determined Milestone Set by NTC.
- \* Date in Which Test Script Execution Begins.

#### **IDENTIFY OVERALL COORDINATOR:**

# **IDENTIFY TESTING FOCUS:**

\* Specific Testing Category (e.g. congestion, link failure)

# TESTS SCENARIOS IDENTIFIED:

- \* Specific Test Scenarios That Apply to and Support the Focus of the Test Phase.
- \* Driven by Contribution to the NTC.

# **TEST SCRIPT AUTHORS:**

\* NTC participant Volunteers who will Author Test Script for Submission to NTC for Review and Approval.

#### **DEVELOP NETWORK CONFIGURATION:**

- \* Specify Network Architecture, Elements and Connectivity to Support Defined Test Scenarios.
- \* Network Configuration is Developed by NTC.

# **TEST PARTICIPANTS IDENTIFIED:**

\* NTC Primary and Secondary Participant Volunteers.

#### **TEST SCRIPTS SUBMITTED TO NTC:**

- \* Formal Contributions to the NTC Supporting Identified Test Scenarios.
- \* Detail Document Providing Sufficient Information To Testers to Execute Intended Test.
- \* Test Script will Comply to Format Established by NTC.

#### **TEST SCRIPT REVIEW:**

- \* Detail Analysis for Content and Intent by NTC.
- \* Modifications of Test Script(s) Upon Recommendations of NTC.
- \* Baseline Test Scripts Identified and Criteria Established.

#### **TEST SCRIPT FINAL APPROVAL BY THE NTC:**

\* Approval of Test Script(s) by NTC After Final Modification Has Been Completed.

**Dates** 

<u>Obj</u>

<u>Act</u>

#### **FINALIZE TEST DATES:**

\* All Applicable Phase Schedule Test Dates Finalized by NTC.

# HAND OVER TO OVERALL COORDINATOR:

- \* NTC Hands Off Test phase package to Overall Coordinator under the Guidelines of Responsibilities and Definitions.
- \* Process Review Lists

# **TEST SCRIPT REVIEW BY TESTER:**

\* Detailed Line by Line Review of the Finalized
Test Script(s) between the Author, Coordinator,
and Testers for Clarification of Content and Intent.

\* Individual Lab Paguirements may Distate Minor

\* Individual Lab Requirements may Dictate Minor Tailoring to Execute Test Script. Tailoring Should Not Modify Intent of Test Script.

#### **NETWORK CONFIGURATION PREPARATION**

# 1. Facility Installation Complete

- \* Identify T1 Contact
- \* T1 Installed/Verified/Tested
- \* T1 Facility Burn In Period
- \* End to End T1 Channel Connected to HUB

#### 2. Network Element Preparation Complete

\* Datafill (Elements/Simulators)

# 3. Network Element Interconnection Completed

- \* Interconnect Elements (cross connect) and Simulators
- \* Links Aligned
- \* Monitor Points Installed and Tested

#### 4. Pre Baseline Preparation

- \* End to End Call Thru
- \* Background Traffic
- \* Verification of Routing, Gateway Screening Translations, e.g. at least 1a, 1c, Script Excerpts

#### 5. Baseline Test Complete

- \* Three (3) Hour Soak
- \* The date by which all baseline testing has been completed successfully, the network under test is stable and the tests identified by the NTC can be applied to the network.

**NTC Reference Document** 

April 1997

NOTE: Objective of call completion rated higher than 99.9%

Dates Obj **Act** 

**TEST START:** 

\* The date that the application of the test scripts developed by the NTC commences.

TEST PHASE COMPLETION:
\* Committed tests completion date.

**PRELIMINARY ANALYSIS COMPLETED:** 

**ACTION RESPONSE ISSUED:** 

**GENERATE PROCESS IMPROVEMENT LIST:** 

**DRAFT FINAL REPORT ISSUED TO NTC:** 

**FINAL REPORT ISSUED:** 

NTC Reference Document April 1997

#### 17. REPORTS

This section outline the reports to be generated by the participants in the phase under test.

### 17.1 STATUS REPORT

The status is a high level progress report of the individual test scenarios. This report shall contain no proprietary information, per the Information Sharing guidelines. This report will be compiled by the individual testing participants and presented to the NTC and NIIF, consistent with the Information Sharing Guidelines.

The Status Report shall be issued one (1) week following the completion of testing and shall contain the following information:

- a. Configuration and participation
- b. Number of tests scheduled/completed
- c. Reasons for any tests not executed
- d. Justification for any test cases added, deleted or modified
- e. Any anomalies observed
- f. Date due
- g. General comments on test activity

#### 17.2 PRELIMINARY ANALYSIS

The Preliminary Analysis is an internal report developed by the test participants. This is the initial evaluation of the results of the test suite. This will not be disseminated beyond the confines of the participant organization without compliance to the NTC Information Sharing Guidelines.

The Preliminary Analysis shall be issued within 4-6 weeks following completion of the tests. The Analysis shall contain the following information:

- a. Items A-D of the Status Report
- b. Detailed test case results
- c. All issues, abnormalities and ambiguities identified with the associated Action items
- **d.** Date action items responses are due
- e. Date Final Report due

#### 17.3 FINAL REPORT

Per the NTC Information Sharing Guidelines, the Final Report will be developed by the participants. Prior to issuance of the final report for general distribution, the participants of the test phase for which the final report reflects the outcome shall provide the NTC the opportunity to review such report. The intent of the review shall not be to change content in regards to the findings but where necessary provide for clarification and understanding. The report will be forwarded to the NIIF for distribution.

The Final Report shall be issued within 10-13 weeks following completion of testing. this report shall contain the following information:

- a. Items A-C of Preliminary Report
- **b.** Disposition of all action items
- c. Conclusion/Comments of test
- d. Recommendations for future test activities
- e. Results of requested retests from previous test Phases

To the extent applicable, each anomaly / anomaly / finding / observation will be reported in the following manner:

- a. Anomaly number:
- b. Anomaly title:
- **c.** Test #:
- d. Scope:
- e. Likelihood of Occurrence / Trigger:
- f. Potential Impact:
- g. Severity:
- **h.** Interconnect notification recommended? y/n:
- i. Interconnect notification priority:
- i. Anomaly description: (including supporting signaling as required)
- **k.** Anomaly verification/status:

1. References to applicable standards/requirements

#### These items can be further described as follows:

- a. Anomaly number: Each anomaly will be given a unique number of the format p-n where p is the number of the NTC test phase and n is a sequence number which is unique within the phase. In general, the most significant results will be assigned lower sequence numbers and will appear first in the Final Report
- **b.** Anomaly title: The title briefly identifies the essential point of the item.
- c. Test Number: The number of the test(s) during which the anomaly was observed.
- d. Scope: Scope identifies where the item might be expected to be observed (e.g., all switches using a particular software capability, switches translated in a particular manner, etc.) Identify the network(s) affected: Local; interconnected or both.
- e. Likelihood of occurrence / Trigger: This indicates the likelihood of observing this item in the live network, and / or the triggering event(s) which can lead to its manifestation.
- f. Potential Impact: This indicates the potential consequences of this anomaly (e.g., abnormal termination of calls, compromised redundancy, excessive signaling traffic, loss of a particular service) to the affected networks and their subscribers including the extent of the impact.
- g. Severity: Based on the above, this gives the primary participants' assessment of the severity of the item (e.g., critical requires immediate attention and corrective measures, major poses a serious but unlikely threat, etc.).
- h. Interconnect notification recommended? y/n: Indicates whether the participants believe that a network experiencing this anomaly is obligated to notify its interconnected networks per the NIIF Information Sharing Guidelines
- i. Interconnection notification priority: The priority with which such notification (if applicable), should take place (e.g., Urgent, Timely)
- j. Anomaly Description: (including supporting signaling as required): This gives a detailed description of the item including the circumstances under which it was observed, relevant standards and requirements, and any remaining questions regarding the anomaly.

- **k.** Anomaly verification / resolution status: This gives the current status of efforts to resolve the item (e.g., cause under investigation, cause identified resolution scheduled, fix delivered retest performed).
- I. References to applicable standards/requirements: The sections of applicable Standards/Requirements which define proper behavior under the observed conditions. Should include Standard/Requirement number, title and issue number as well as the section numbers and headings of the applicable sections
- 17.4 All reports will be generated and distributed in accordance with agreed upon NTC Information Sharing Guidelines.

#### 18. APPENDICES

Appendix 1 - Example of Letter of Intent

**Issuing Company's Address** 

Date

NTC Members,

(Company), a participant in the Network Testing Committee (NTC), intends to participate in the Phase (Test Number) testing configuration. it is our intention to offer up for interconnection our (nodes, i.e., Signaling Transfer Point STP) laboratory located in (City, State, the XXXX) to act as an Access Tandem and the YYYY to be the End Office located in (City, State).

It is our understanding that the testing period is from (Date through Date) with an expected start date for interconnection and pre testing to start (Date) to facilitate baseline testing.

We reserve the right at all times based on the needs of our Customers and business to interrupt testing at any time with a minimum (24) twenty four notification to all participants.

Should you have any questions in regards to this subject please feel free to contact me at (NPA) NXX-XXXX.

Name of Author Title

cc:

# Appendix 2 - NTC Hourly Log

#### NTC HOURLY LOG

Phase Number:					
Quantity of Tests:					
ACTIVITY	Primary Participant	Secondary Participant	Contributing Participant	Test Author	Equipment Hours
Phase Development	•				
Test Script Preparation					
Test Script Review					
Pretest					
Actual Test					
Test Data Analysis					
Retest/Verification					
Total					

All person hours will be accounted for in one hour increments.

Phase Development: All administrative hours associated with NTC.

Test Script Development: All hours associated with test script development.

Test Script Review: All

# **Appendix 3 - NTC List of Primary Contacts**

# **NTC List of Primary Contacts**

Name	Company	Tel. No.	FAX No.	E-Mail Address
Bradshaw, Randy	AT&T Wireless	206-702-2663	206-580-5020	randy.bradshaw@attws
Currie, Dan	Bell Atlantic	215-466-2732	215-564-2540	daniel.a.currie@bell-atl.com
DeMarco, Dan	SNET	203-420-7228	203-686-0223	dande@snet.com
Eby, Steve	DSC	972-519-2173	972-519-3855	seby@spd.dsccc.com
Egas, Peter	Siemens	407-955-6889	407-955-6245	peter.egas@ssc.siemens.com
Faff, Frank	General Signal Networks	609-866-1100	609-439-3004	frank.faff@gsnetworks. gensig.com
Goodwin, Craig	EIT	613-342-9652	613-342-4134	operations@eit.ca
Gregory, Randall	NORTEL	919-905-8664	919-905-3918	rgregory@nortel.ca
Haben, Ken	Lucent Tech	630-224-7124	630-224 7043	kgh@ihgp.ih.lucent.com
Hastie, Stan	Stentor	613-228-4078	613-224-8544	hastiesd@stentor.ca
Hlavacek, Ken	SCP (Bellcore)	908-699-4626	908-336-2861	khlavace@notes.cc.bellcore.com
Jones, Allan	Pacific Bell	510-823-7672	510-866-2036	adjones@pacbell.com
Kuna, Luanne	MCI	770-971-6923	Call for FAX#	luanne.kuna@mci.com
Melvin, Jim	U S WEST	303-707-8193	303-707-9330	jmelvin@uswest.com
Morris, Ellina	Ameritech	847-248-5495	847-248-6746	ellina.morris@ameritech.com
Mui, Mark	AT&T	908-949-4586	908-949-0629	markslm@hogpa.att.com
Murphy, John	NYNEX	508-580-6065	508-580-2510	murphyj@nynexst.com
Questore, Joe	Overall Coord (Bellcore)	908-758-2125	908-758-4060	jgq@notes.cc.bellcore.com
Sanders, Toni	SWBT	972-454-6476	972-454-6296	ts9475@txmail.sbc.com
Shelton, William	Sprint	415-375-3843	415-375-3454	shelton@sprint.network.com
Sprague, Beth	ATIS	202-434-8849	202-393-5453	bsprague@atis.org
Tacker, Ken	Ericsson Inc	972-583-5599	972-583-7806	euskta@exu.ericsson.se
Stith, Dave	AirTouch Cellular	510-279-6791	510-279-6606	david.stith@airtouch.com
Theret, Gerry	MFS-Intelenet	201-938-7407	201-938-7335	
Willett, Gary	GTE Telops	972-718-3416	972-718-1405	gary.willett@telops.gte.com
Yazdani, David	Tekelec	919-460-2118	919-460-0877	david.yazdani@tekelec.com

Note:

ATIS Home Page address is http://www.atis.org

**April 1997** 

# Appendix 4 - Issue Status

# **Issue Status**

Test Phase Number & Previous Phase	Test Number	Anomaly Number	Anomaly Title	Status 1	Resolution Date

<sup>&</sup>lt;sup>1</sup>OPEN: Under investigation, no resolution identified at this time. PENDING: Resolution identified, awaiting retest and/or approval of Primary Participants REFERRED: Anomaly referred to a forum outside NTC for an industry solution (i.e., NIIF, T1) CLOSED: Resolved to the satisfaction of affected parties

<sup>\*</sup> To be used only by the NTC for administrative purposes. \* Not for publication or use outside of the NTC.

# Appendix 5 - Participant Responsibility List

#### 1. Test Plan Information

- A. Order of tests
- B. Manual call requirements
- C. Data collection points identified
- **D.** Scheduled tester review of scripts

# 2. Network Configuration/Facilities Information

- A. Identify network elements, point codes
- B. Identify capabilities of network elements (Software releases, EO, AT, SCP, STP)
- C. Identify timing sources
- **D.** Provide datafill details

#### a. ISUP Trunks

- Quantity or real and virtual
- CIC assignments
- Glare control and what method
- COT requirements and distance issues
- CLLI codes and circuit layout records for links and trunks (i.e., T1 Channel, MUX, Cross-connect assignments)

# b. Routing

- Full point code or cluster routing
- Combined or non-combined linksets
- Single or multiple link linksets
- Primary and /or alternate routing schemes for trunks (real office live, load box calls and simulated office)
- CCS routing definitions for network element to network element; primary, alternate and final routes
- GTT information for 800 and/or LIDB
- Network Management responses (alternate routing versus call failure)

#### c. Screening

For Gateway screening, what and who are to be screened

#### d. Traffic

- Type of traffic and amount generated for real and virtual ISUP trunks
- 800 numbers for inter and intra-exchange traffic
- POTS numbers for inter and intra-exchange, direct and indirect
- LIDB card numbers, translation type
- Line assignments for routing over real trunks
- Line assignments for routing over virtual trunks

#### 3. Simulators Information

- A. Number of simulated SSP's
- B. Type and amount of traffic being generated
- C. Call load boxes (EO) originating/terminating capacity, call hold time, intercall delay, glare control

# 4. Data Collection/Analysis Information

- A. Types of reports being generated from network elements and at what interval (information within each report)
- **B.** Detail of analysis of data involved
- C. Participant role during analysis
- D. Identify procedure for synchronizing clocks, this should be done at least once a day
- E. Required data exchange formats, decode or analysis programs file sizes, disk storage space requirements

# 5. Miscellaneous Information

- A. Lab contacts names, phone numbers, fax numbers, pager phone numbers
- **B.** Testing hours and conference bridge number(s)
- C. Baseline traffic (amount, type, description, amount of time for baseline)

# Appendix 6 - Baseline Definition and Objectives

The NTC has developed a draft definition for "baseline testing" that reads as follows:

A suite of tests that establishes a level of performance that enables call processing and the transmit and receiving of network management signaling messages, to maintain the stability and integrity of the interconnected network; this includes network monitoring and data gathering equipment.

A set of baseline test objectives was proposed as follows:

- End to end Call Thru (for each call type)
- Ability to capture data
- Verify ability of network to carry the traffic load (determined by the participants)
- Verify signaling routes
- Verify trunking routes
  - \* Expected results need to be in the test script
- Verify Global Title Translations
- Verify Gateway Screening

Call Through tests noted in the test objectives should include; 1) live call through, 2) simulator traffic, and 3) virtual traffic, to verify that routing and translations are correct.

Next steps/action items are as follows:

- 1. Determine what tests should be performed by each individual primary participant in their network prior to the commencement of "baseline testing" pre-baseline
- 2. Develop test scripts where applicable for baseline and pre-baseline
- 3. Prior to development of tests, we need to identify what we are trying to validate or invalidate

Tests that have been suggested as "baseline" include:

Test n.0.5 - Multiple A, B/D, C Link Failures

Test n.11 - MTP Compatibility Tests

Test n.12 - Intrusive ISUP Compatibility Tests - Non-ISDN

Test n.4 - TFC Message Verification

# STATUS REPORT NTC DOCUMENT

THIS PAGE SHALL BE USED FOR THE TRACKING/STATUS OF ALL AGREED UPON SECTIONS AND PARAGRAPHS.

Attachment F
----NTC Reference Document
April 1997

NAME	COMPANY TELEPHONE		FAX	
Allen, Lonnie	GTE	214-718-7544	214-718-7875	
Ash, Dale	U S WEST	303-707-8194	303-707-9330	
Doskow, Art	NYNEX	212-967-3713	212-564-5629	
Faff, Frank	Telenex	703-644-9158	703-644-9011	
Gregory, Randall	NorTel	919-481-8664	919-481-8892	
Haben, Ken	AT&T-NS	708-224-7124	708-224 7043	
Haullotte	SWBT	214-454-6410	214-454-6497	
Hwang, Howard	DSC	214-519-2713	214-519-4565	
Johns, Alan	BellSouth	404-529-2901	404-529-6922	
Jones, Allan	Pacific Bell	510-823-7672	510-866-2036	
Kuna, Luanne	MCI	404-971-6923	Call for FAX#	
Morris, Ellina	Ameritech	708-248-5495	708-248-6746	
Mui, Mark	AT&T	908-949-4586	908-949-0629	
Questore, Joe	Bellcore	908-758-2125	908-758-4389	
Rice, Patrick	Tekelec	919-460-5554	919-460-0877	
Russo, Karl	SNET	203-420-7221	203-686-0223	
Scott, Thomas	Bellcore (SCP)	908-699-6021	908-336-2861	
Shelton, William	Sprint	415-375-3843	415-375-3454	
Sullivan, Mark	Stentor	613-228-4108	613-224-8544	
Tacker, Ken	Ericsson	214-907-5911	214-997-4994	
Walsh, Brian	MFS	703-391-5782	703-620-8961	
Whisler, Jay	Bell Atlantic	215-466-2972	215-563-0961	